STATE OF UTAH GENERAL OUTLOOK
Jan 1, 2008

SUMMARY

January 1, 2008 and the roller coaster that is Utah climate has begun. October was actually the month that seldom happens - statewide precipitation was 101% of average, something normal for a change. Enter November and the roller coaster begins - with a very dry spell and statewide, high elevation precipitation at only 37% of average. Wait the proverbial 5 minutes or go 5 miles and we have December where precipitation was 136% of average. So, on average for the young water year of 2008, we are at 92% of normal precipitation - the road to get there was full of ups and downs. Snowpack has had a similar twisted path - southern Utah had essentially no snow until the beginning of December when with a couple of major storms, snowpacks went from zero to values up to 180% of average. October had several impressive snow storms in northern Utah but subsequent warm and dry conditions in November melted all but the protected northern aspects. This shallow snow remnant near the ground surface has created much of the instability in current snowpacks leading to many large avalanches. Currently snowpacks in northern Utah range from 69% on the Bear to 86% on the Provo watershed. In southern Utah, snowpacks range from 98% in the southeast to 115% on the Sevier River. This is a very interesting situation regarding snowpacks as this is a La Nina year and, in a typical La Nina year, southern Utah normally turns out very dry and northern Utah typically has average to above average snowpacks. The La Nina signature in southern Utah is strong enough that at Webster Flat, Panguitch Lake and others, 75% to 85% of the time they accumulate below average snowpack. In fact, out of 14 La Nina years analyzed for Panguitch Lake Snow Course, 7 of those years had less than 20% of average snowpack and 5 years had zero snow on April 1. On the positive side, 3 of the 14 years were average and 1 of the three was at 180% of average - so La Nina conditions do not preclude a decent snowpack in southern Utah, but the statistics are pretty solid for below normal conditions. Soil moisture values are: Bear - 50%, Weber - 48%, Provo - 37%, Uintah Basin - 32%, southeast Utah - 41%, Sevier - 36%, southwest Utah - 36%, and statewide - 40% of saturation. These values are similar to those of January 1, 2006 and drier than those of last year. Reservoir storage (52% of capacity) took a hit last summer and has declined 15% compared to last year. General water supply conditions range from much below to near average. Streamflow forecasts range from 51% for the Bear River at Stewart Dam to 122% of average on San Juan at Bluff. Surface Water Supply Indices range from 8% on the Bear River to 76% on the Virgin River.

SNOWPACK

January first snowpacks as measured by the NRCS SNOTEL are as follows: Bear - 69%, Weber - 84%, Provo - 86%, Uintahs - 76%, southeast Utah - 98%, Sevier - 115%, southwest Utah - 106% and the statewide figure is 87% of average. To reach average snowpack conditions by April 1, we need 109% of average snowpack accumulation. The probability of getting this amount of snow is 41%.

PRECIPITATION

Mountain precipitation during December was near to much above normal in northern Utah (103%-138%) and much above normal across southern Utah (168%-182%). This brings the seasonal accumulation (Oct-Dec) to 92% of average statewide and ranges from 80% on the Bear to 100% over southeastern Utah.

RESERVOIRS

Storage in 41 of Utah's key irrigation reservoirs is at 52% of capacity down 15% from January 1 of last year. Reservoirs across the State declined substantially this past year due to a very long, hot and dry summer period. There are some such as Willard Bay, Scofield and the Enterprise reservoirs that have fill restrictions that will limit overall water supplies in those areas.

STREAMFLOW

Snowmelt streamflows are expected to have a wide range from below average to near average across the state of Utah this year. Forecast streamflows range from 51% on the Bear River at Stewart Dam to 122% of average on the San Juan nr Bluff. Most flows are forecast to be in the 70% to 90% range.